STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: /0/553, 676
Source: /FWP
Date Processed by STIC: 8//5/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/553,676
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE	
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown. Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWP

RAW SEQUENCE LISTING DATE: 08/15/2006 PATENT APPLICATION: US/10/553,676 TIME: 12:21:39

NRS)
Prapeutic target in diabetes

Juggestem: Consult

Sequera Rules

Corrected Comply

Server Comply

Server Not Comply

Server Needed Input Set : A:\PTO.RJ.txt Output Set: N:\CRF4\08152006\J553676.raw 5 <110> APPLICANT: MERCK-SANTE

6 CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)

9 <120> TITLE OF INVENTION: Insulin-induced gene as therapeutic target in diabetes

13 <130> FILE REFERENCE: BFF 03P0004

C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/553,676

C--> 17 <141> CURRENT FILING DATE: 2005-10-17

17 <160> NUMBER OF SEQ ID NOS: 8

21 <170> SOFTWARE: PatentIn version 3.1

ERRORED SEQUENCES

see pr 1-4 73 <210> SEQ ID NO: 2 75 <211> LENGTH: 353 77 <212> TYPE: PRT 79 <213> ORGANISM: Rattus sp. 83 <400> SEQUENCE: 2 85 Met Leu Cys Thr Leu Phe Leu Leu Leu Leu Ala Leu Gly Ile Val Gln 86 1 5 10 15 5 10 15 10 89 Thr Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Glu Glu Thr Phe E--> 90 20 25 30 25 90 20 20 30 30 93 Gly Deu Phe Asp Ser Phe Ser Leu Ile Arg Val Asp Cys Ser Ser Leu

E--> 94 / 35 40 45 97/Gly Pro His Ile Val Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu E--> 9.6 50 55 60

/101 Asp Leu Ser Ser Asn Arg Leu Glu Thr Val Asn Glu Ser Val Leu Gly -->/102 65 70 75

 $^{\prime}$ 105 Gly Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu > 106 85 90 95

109 Leu Thr Ser Ile Thr Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu

105 110

113 Ser Leu Asp Leu Ser His Asn Gly Leu Ala Ala Leu Pro Ala Glu Val

115 120 125

117 Phe Thr Ser Ser Pro Leu Ser Asp Ile Asn Leu Ser His Asn Arg Leu

135 140

121 Arg Glu Val Ser Ile Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala

150 155 160

125 Leu His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Leu Pro Tyr 175

c> 126 165 170

127 Pro Ala Arg Ala Ser Leu Ser Ala Pro Thr Ile Gln Ser Leu Asn 🖼 185 190

131 Ser Trp Asn Arg Leu Arg Ala Val Pro Asp Leu Arg Asp Leu Pro Leu 205 E--> 132 200

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see p.2

RAW SEQUENCE LISTING DATE: 08/15/2006 PATENT APPLICATION: US/10/553,676 TIME: 12:21:39

Input Set: A:\PTO.RJ.txt
Output Set: N:\CRF4\08152006\J553676.raw

135 Arg Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Thr Ile Ash Pro Gly E--> 136 / 210215 220 139/Ala Phe Met Gly Leu Ala Gly Leu Thr His Leu Ser Leu Ala Ser Deu ever E--> 140 225 230 235 240 ot 143 Gln Gly Ile Leu Gln Leu Pro Pro His Gly Phe Arg Glu Leu Pro Gly 245 250 255 147 Leu Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Lys Trp Ala Gly 265 270 151 Ala Glu Val Phe Ser Gly Leu Gly Leu Leu Gln Glu Leu Asp Leu Ser > 152 280 285 155 Gly Ser Ser Leu Val Pro Leu Pro Glu Thr Leu Leu His His Leu Pro 300 E--> 156 290 295 159 Ala Leu Gln Ser Val Ser Val Gly Gln Asp Val Gln Cys Arg Arg Lex 315 320 163 Val Arg Glu Gly Ala Val His Arg Gln Pro Gly Ser Ser Pro Lyz Val 325 330 335 167 Val Leu His Cys Gly Asp Thr Gln Glu Ser Ala Arg Gly Pro Asp Ile E--> 168 345 171 Leu 339 <210> SEQ ID NO: 4 341 <211> LENGTH: 353 343 <212> TYPE: PRT 345 <213> ORGANISM: Homo sapiens 349 <220> FEATURE: 351 <221> NAME/KEY: misc_feature 353 <222> LOCATION: (121)..(121) 355 <223> OTHER INFORMATION: 'Xaa' in position 121 represents Ala or Thr. 357 <400> SEQUENCE: 4 359 Met Pro Trp Pro Leu Leu Leu Leu Ala Val Ser Gly Ala Gln Thr mesaligned runtur 10 363 Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly, 20 E--> 364 25 30 367 Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly E--> 368 / 35 40 45 371 Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp E--> 372 \ 50 55 60 375 Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly E--> 376 65 75 379 Pro Gly Tyr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu 85 90 95 383 Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser W--> 387 Leu Asp Leu Ser His Asn Gly Leu Xaa Ala Leu Pro Ala Glu Ser Phe SUP SE--> 388 115 120 125 115 391 Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg E--> 392 \ 130 135 140 395 Glu Val Ser Val Ser Ala Phe Thr His Ser Gln Gly Arg Ala Leu E--> 396 145 150 155 160 399 His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro

RAW SEQUENCE LISTING DATE: 08/15/2006 PATENT APPLICATION: US/10/553,676 TIME: 12:21:39

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\08152006\J553676.raw

E--> 400 170 175 403 Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala 180 190 185 407 Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg E--> 408 E--> 412 E--> 416 225 423 Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn Trp Ala Gly Ala E--> 424 265 270 427 Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly 280 285 431 Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu His Leu Pro Ala E--> 432 290 295 300 435 Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys Arg Arg Leu Val E--> 436 305 310 315 439 Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser Pro Lys Val Ala E--> 440 325 330 335 446 Leu

491 <210 > SEQ ID NO: 8

493 <211 > LENGTH: 29

495 <212 > TYPE: DNA

C--> 497 <213 > ORGANISM: Artificial () primer

W--> 501 <220 > PEATURE:

W--> 501 <222 > OTHER INFORMATION: hove primer

W--> 501 <400 > 8

502 gatggaaaga gctcttacat gtgtttatt

E--> 504 1

E--> 504 P03139 VE

Header

495 <212 > TYPE: DNA

C2237 | Primer

C2237 | Primer

C2237 | Calculate to C2237 | Calcula 442 Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg Gly Pro Thr Ile section, not on (2137 line) This even also appears in Sequeror 5 though 7. for Sequence 3 /0/583,676 4

400> 3
tocagococce acc atg cog tgg coc ctg ctg ctg ctg ctg gcc gtg agt 49

Met Pro Trp Pro Leu Leu Leu Leu Leu Ala val Ser 49

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Move amike acids directly

When their codons

the abovers a sample of global

even if Sequence 3

And Sequence 3

VERIFICATION SUMMARYDATE: 08/15/2006PATENT APPLICATION: US/10/553,676TIME: 12:21:40

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\08152006\J553676.raw

```
L:17 M:270 C: Current Application Number differs, Replaced Current Application No
L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:86 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:2
M:332 Repeated in SeqNo=2
L:194 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:190
L:197 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:201 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:205 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:209 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:213 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:217 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:221 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:385
L:225 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:229 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:233 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:237 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:241 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:245 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:249 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:255 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:259 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:263 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:267 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:271 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:275 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:279 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:283 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:287 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:3
L:360 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:4
M:332 Repeated in SeqNo=4
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:112
L:456 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:459 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213>
ORGANISM: Artificial Sequence
L:459 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213>
ORGANISM: Artificial Sequence
L:459 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5, Line#:459
L:469 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:473 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:6, <213>
ORGANISM: Artificial Sequence
L:473 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:6, <213>
ORGANISM: Artificial Sequence
L:473 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:473
L:483 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:487 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:7, <213>
ORGANISM: Artificial Sequence
L:487 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:7, <213>
ORGANISM: Artificial Sequence
L:487 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:487
L:497 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:501 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:8, <213>
ORGANISM: Artificial Sequence
```

 $L:501\ M:258\ W:$ Mandatory Feature missing, <223> Tag not found for SEQ#:8, <213>

ORGANISM:Artificial Sequence

L:501 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:8,Line#:501

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Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\08152006\J553676.raw

L:504 M:254 E: No. of Bases conflict, this line has no nucleotides.

L:506 M:334 E: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:2

L:508 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:8